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PRACTICE PAPER

Peer Assisted Learning in an Undergraduate Hospitality Course: Second Year Students Supporting First Year Students in Group Learning

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Abstract

The paper describes the implementation of a Peer Assisted Learning (PAL) programme on the Management Foundation Course in the School of Service Industries at Bournemouth University. PAL is a specialised form of mentoring whereby trained second year students - Student Leaders - run study support for first year students. The emphasis is on the acquisition by first years of a deeper understanding of course subject matter and the development of critical thinking skills. Student Leaders do not teach and have no specific knowledge to impart, but instead facilitate group discussion among first years through the use of process-oriented techniques. PAL is contextualised to Service Industries by its emphasis on assistance with difficult course components. The evidence base of PAL is discussed as are the research aims of the PAL Project.

Keywords: peer, mentoring, process-oriented, critical thinking

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Hugh Fleming is a Learner Support Tutor attached to the PAL Project as Project Manager for two days a week, with responsibility for disseminating Project findings, organising staff and student courses and workshops, supervising PAL within the university and with day-to-day responsibility for the PAL Project. Hugh Fleming is also chair of the UK Supplemental Instruction (ie., Peer Assisted Learning) Network, which meets three times a year to discuss practice and experience in PAL.

Introduction

With the start of the academic year 2001, a new type of mentoring scheme has been launched in the School of Service Industries at Bournemouth University. The scheme will run in the common first year for the Management Foundation Course (MFC) which incorporates the following first year degree and Higher National Diploma courses: BA (Hons) International Hospitality Management, BSc (Hons) Licensed Retail Management, BA (Hons) Hospitality Business Development and the HND International Food and Hospitality Management.

Peer Assisted Learning (PAL) is based upon a North American system called Supplemental Instruction (SI) which was initiated at the University of Missouri, Kansas City. PAL is a specialised form of mentoring in which trained second year students, 'Student Leaders', run study support sessions for first year students. In these sessions, first year students have a place to test their understanding of difficult concepts, gain confidence through discussing complex course material, engage in co-operative problem solving methods and, through these, acquire a deeper understanding of course content. Sessions are informal and are facilitated by second year students who have been deemed course competent and approved by their course tutor. In addition to academic matters, students may also discuss other issues connected with their experience at university in a safe, supportive and confidential environment.

Conceptual and evidence base of Peer Assisted Learning

The additional and increasingly diverse range of students now entering higher education inevitably means increased pressure on the availability of one-to-one contact time with staff, and students are expected to become increasingly self-sufficient in their learning. PAL works with this reality by empowering students to take greater ownership and responsibility for their own learning. PAL sessions provide a setting for students to collaborate in discussing and solving problems, working through examples, reviewing the content of lectures and sharing lecture notes, identifying key issues, and anticipating and answering potential examination questions. It is this approach that, it is hoped, will engender a deeper and more solid understanding of their course.

The focus of PAL is on the development and application of 'higher level' cognitive skills through the autonomy of a group of learners. Wallace (1997:78) based the implementation of a Supplemental Instruction programme on the view that:

"Co-operative learning encouraged students to take responsibility for their own learning which could lead to a greater involvement in the learning process (Entwistle, 1992) thereby promoting learning through the interaction within discussion."

Wallace (1997) suggests that PAL is effective because it develops 'metacognition'; the student's own monitoring and management of learning. Gibbs (1990) suggests that learning which entails abstraction of meaning and making sense of information occurs where the learner 'does most of the work and makes most of the decisions.'

Congos and Schoeps (1998:4) propose a model in which PAL operates through the refinement of learning and thinking skills, and the application of these to course subject matter.

"Learning skills... such as note organization, techniques for reading textbooks, reviewing and reciting material to be learned, self-testing, memory, reasoning, application, test evaluation techniques, etc. are applied to course content... This leads to knowledge and degrees of content mastery."

Congos & Schoeps (1998:5) suggest also that within PAL:

"Participants collaborate to supply missing information or attempt solutions to problems as they help each other... Misconceptions, omissions, and ineffective problem solving mechanisms are

discovered, corrections are attempted, and information about solutions exchanged among those present. This facilitates independent learning (Pines & West, 1986).”

The focus of PAL is not to ‘teach’ learning and thinking skills to students, rather that such skills and, through their application, subsequent knowledge and understanding of course subject matter, may develop within the co-operative environment of the PAL session.

It has been suggested that PAL accentuates a student's capacity for 'critical thinking' (Congos et al., 1997; Garland and Gordy, 1987; Gordy and Garland, 1987; Koehler, 1995; Wilcox and Koehler, 1996). Though such assertions have not been well evidenced in a particular way to PAL, it is proposed that the natural flow of a session, and more specifically the process questions Student Leaders ask, will encourage such learning. Student Leaders may, for example, ask first year students to present evidence for their assertions, define terms they have been using, identify the main themes of a lecture, generate exam questions, relate different parts of a course together, or provide real life examples of an abstraction. Through the encouragement of discussion which is centred on understanding and critical thinking - in essence a focus on a deep approach to learning - PAL aims to improve the student's experience of their subject. This in turn may lead to benefits in terms of retention and achievement of students.

PAL has often been implemented in a course or institution for the most pragmatic of reasons; to aid retention and bolster academic performance. Extensive research in the US (Blanc et al., 1983; Burmeister et al., 1996; Congos and Schoeps, 1993; Etter and Burmeister, 2000; Kochenour et al., 1997) including a national study covering 49 institutions and 1477 courses (Martin and Arendale, 1993), and in the UK (Bidgood, 1994), has concluded that PAL fulfils these aims. In comparisons of end of year marks, degree classifications and attrition rates between those who attend PAL regularly and those who do not, the above studies have found statistically significant differences. An emerging consensus in the literature is that a threshold of around four to five attendances at PAL is enough to secure around a five per cent increase in grades and a correspondingly higher retention rate between those who attend PAL and those who do not. Methodological issues do remain, not least those connected with 'self-selection bias', the notion that students who are well-motivated, or in some other way predisposed to do well and persist at university, will attend PAL sessions, thus skewing research data. A causal relationship is difficult to establish in research in PAL, as part of the philosophy of PAL is that it be open to all students. In attempting to control for self-selection bias in US studies, a student's Grade Point Average on entering college is often used as a control variable. In the UK study by Bidgood (1993) A-Level grades were used as a control variable. Even when these variables are accounted for, PAL attendance can be shown to correlate with higher grades and lower attrition rates. Longitudinal research, such as that included in the Martin and Arendale (1993) study also indicates that the introduction of a PAL programme is able to aid retention and performance in comparison to the previous year.

Because of the transferable, higher level skills PAL aims to develop, there is no course type to which PAL is specifically applicable, though PAL is most frequently used on courses with conceptually difficult subject content. PAL operates successfully, for example in Art and Design courses (Surrey Institute of Art and Design), Law and Mathematics (University College London), Cognitive Science (University of Sussex), English and Chemistry (Manchester University), Health and Social Care (College of North East London).

Student Leaders

Central to PAL is the management of PAL sessions by the second year students recruited and trained for the task: the Student Leaders. Student Leaders are expected to be course competent, in that they have successfully completed the course of study which the first year student is about to undertake and are cognisant of their own specific learning styles (Wallace, 1997). It is the role of the Student Leader to help participants in a session get the most from their learning by thinking through problems for themselves. Student Leaders help first year students work through aspects of the course which they

may be having difficulty understanding. In the MFC course at Bournemouth University, such course elements include e-commerce and business strategy, restaurant management and completion of portfolios.

PAL also offers a unique method of providing members of the course team with regular and ongoing feedback. Student Leaders will meet with a member of the course team on a monthly basis, to report back on how course content is being received, how first year students are progressing and what they are finding difficult to understand.

Techniques of PAL

As indicated above, Student Leaders are not allowed to teach and, unlike lecturers, they have no specific knowledge to impart. Instead the emphasis is on Student Leaders who can facilitate and help others discover the answers for themselves. This involves developing a climate of trust and support within their PAL group, helping first year students to agree clear objectives and agreed goals for each PAL session, and enabling open lines of communication in which first year students are encouraged to participate, share ideas and join in discussion. Student Leaders encourage this through redirecting questions back to the group, using probes to clarify material or get students to think critically about it, and asking 'process' type questions to get at students' understanding. Examples of process type questions might be: "What was the main theme of the lecture?" "What are the most important concepts in this part of the course?" "How does this fit in with what you have learned previously?" "What exam questions might be set for this part of the course?" "How can you best prepare for your next lecture?" More specific questions will depend upon the course of study in which the PAL session occurs. The Student Leader is guided, and guides students' discussion, by their recently acquired knowledge of the subject matter. Student Leaders will also regularly summarise discussion and review the main points or concepts that have arisen. The intention is to create an environment in which course material becomes more deeply understood and owned by students.

PAL at Bournemouth University

For the academic year 2001/02 five second year students in the School of Service Industries have been recruited and trained for the role of Student Leader. Logistically, it proved difficult to target potential Student Leaders before the summer vacation. Student Leaders were therefore recruited through promotional mailing and emails sent to all first years during the summer. Additionally, mailings and promotional telephone calls were targeted at year one seminar group representatives and other first year students recommended by the Course Tutor. Potential leaders were given information about the nature of PAL and what would be expected of them as leaders. Those that showed interest were invited to complete and return an application form in which, in addition to contact details, they were asked to answer one question: "Why I want to be a PAL Leader (what I might learn, contribute and gain)". All Student Leaders were recruited prior to their returning to commence year two. In the future, it is the intention to recruit Student Leaders at an earlier stage, perhaps by targeting those first year students who have themselves been enthusiastic participants in PAL.

Student Leaders from all courses on which PAL is running in the university underwent a two day training course prior to their registration. In this course they covered such items as: theory of and background to PAL; deep/surface approaches to learning using the 'Revised Approaches to Studying Inventory' (Entwhistle and Tait, 1995); the roles and responsibilities of Student Leaders; and group dynamics and behaviour. Since Student Leaders are expressly forbidden to teach, considerable emphasis was placed on developing their listening, questioning and facilitation skills. There was a strong practical element to the course and each Student Leader had the chance to facilitate a PAL session in order to practise asking probes and process-oriented questions and to gain experience of redirecting questions to other members of the group. Each Student Leader received feedback on their performance. Advice was given on how to manage a PAL session and deal with difficult incidents. Finally, since PAL is very much a student-owned scheme, Student Leaders were given time to prepare

and practise the short talk about the PAL scheme they were to deliver to first year students during their induction week.

PAL in the School of Service Industries

PAL is pro-active in the way in which it targets difficult, high risk courses with levels of student failure or withdrawal which are above usual. PAL is not reactive because it does not attempt to identify students who are academically weak. In other words, PAL targets difficult courses not students with difficulties. The implementation of PAL on the MFC course was requested by course leaders as this course is considered to contain key elements which students have difficulty with, although rates of student failure and withdrawal are not above average on this particular course.

Within the School of Service Industries, PAL is intended to help MFC students master what are perceived to be the more difficult parts of the course. It is also intended that PAL will help students adjust more quickly to university life, acquire better study habits, gain an appreciation of what is required of them later on in their course, as well as developing academically within a supportive learning environment.

PAL is intended to help first years cope with difficult course elements. It has, for example, been suggested by Student Leaders that accountancy and business theory are difficult areas within the MFC course. Student Leaders, having very recently completed their first year studies, are uniquely placed to help first year students develop appropriate learning strategies to overcome their difficulties with such course elements and the course in general. They are also well-equipped to advise on 'survival tactics', such as useful books to buy, kitchen etiquette, time management, how to approach assignments and how to make the most of lectures. PAL sessions have identifiable weekly slots within the MFC course timetable though attendance at PAL sessions is voluntary.

Research at Bournemouth University

It is one of the aims of the PAL Project at Bournemouth University to examine in more depth the character of learning within PAL sessions. This, it is hoped, will allow for the substance of claims that PAL leads to the development of critical thinking and greater understanding to be better evaluated.

The PAL Project will also look at whether PAL sessions can be shown to aid retention and increase performance on a course, by comparing the grades of students according to their levels of attendance at PAL. A number of variables are to be accounted for which may be a part of self-selection, interact with attendance at PAL, or interact with effects of PAL on student grades and student perceptions of PAL. These include prior academic achievement (A-Levels etc.), learning style (deep/surface/strategic), locus of control and self-efficacy. Data gathering is occurring through questionnaires and interviews or focus groups.

It is intended that the Revised Approaches to Studying Inventory (Entwistle and Tait, 1995) and the Motivated Strategies for Learning Questionnaire (Pintrich et al., 1991) will provide some initial data concerning the learning strategies, critical thinking capacity and personality of those students who attend and persist with PAL, compared with those who do not. Throughout the year, Student Leaders are also being asked to evaluate PAL sessions, as are first year students, through a simple questionnaire to be filled in after the session. Interviews and focus groups with Student Leaders and first year students will attempt to further explore the character and processes of learning occurring within PAL sessions, with a view to understanding and developing the character of group learning unique to PAL.

PAL: Year two

This year at Bournemouth University, PAL is operating in three schools over seven courses. It is currently supported through Learning Support, a university central service provider located within

Academic Services. PAL Project staff liaise with academic schools, deliver the leader training programme, and provide ongoing support and supervision of these leaders. They also promote and disseminate information about PAL more widely within the University and the wider UK higher education community through, for example, staff development workshops, short courses, publications, the UK SI/PAL Network, and the Project website. They also run an annual conference to which all UK Student Leaders and Staff Co-ordinators are invited.

The intention is for PAL to be extended to all schools at Bournemouth who wish to participate and for PAL to become embedded within the University's Student Support and Guidance activities through, for example, inclusion in school learning and teaching strategies. Other mechanisms such as inclusion within course timetables and increasing an understanding of PAL, especially with school staff with a responsibility for PAL, are high on this year's agenda. With a common first year, PAL is able to reach over 100 students on different courses in the School of Service Industries. There is no reason that, after the first year, PAL should not reach the remaining students. Appropriate courses for PAL to be placed on will be those where staff are keen to support and embed PAL, and comprising any or all of the following: traditionally difficult course elements (such as Maths), a high workload for first year students, discursive subject matter, and higher than average failure or attrition rates.

Fundamental to the success of PAL at Bournemouth University is the extent to which it is taken up by first year students, and the extent to which it may be demonstrated to benefit first year students and Student Leaders. Attendance in the current term has been variable but sustained, ranging from between 17 students at a session (approximately 15 per cent of the course) to nil-attended sessions. The ideal size of a PAL session is between five and ten students, though such variability is commonplace.

Ultimately, evaluation will be carried out to compare the academic achievement and attrition rates of those students who have taken up PAL and those who have not, according to the methodologies described above. Ongoing evaluation of sessions by Student Leaders and first year students will also inform conceptions of success or failure of PAL at Bournemouth University.

Alongside the implementation of PAL at Bournemouth and its evaluation and research, the PAL Project outcomes are:

- a website, www.peerlearning.ac.uk
- a web-based computer conferencing discussion forum (available via www.peerlearning.ac.uk/html/discussion_area.html)
- a database of good practice providers in the field of PAL
- case studies of student use of PAL (in progress, available via www.peerlearning.ac.uk/html/case_studies.html)
- project dissemination workshops and conferences organised in conjunction with the UK Supplemental Instruction Network
- a PAL trainer's manual (both in print and web-based)
- a Student Leader's advice booklet (both in print and web-based)
- publications

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References

- Bidgood, P. (1994) The success of Supplemental Instruction: Statistical evidence. In C. Rust and J. Wallace (eds.) *Helping students to learn from each other: Supplemental Instruction*. Birmingham, England: Staff and Educational Development Association, 71-79.
- Blanc, R. A., DeBuhr, L. and Martin, D. C. (1983) Breaking the attrition cycle: The effects of Supplemental Instruction on undergraduate performance and attrition. *Journal of Higher Education* 54(1), 80-89.
- Burmeister, S. L., Kenney, P. A., and Nice, D. L. (1996) Analysis of effectiveness of Supplemental Instruction sessions for college algebra, calculus, and statistics. In J. J. Kaput, A. H. Schoenfeld, and E. Dubinsky (eds.) *Research in Collegiate Mathematics Education II*, 145-154.
- Congos, D. H., and Schoeps, N. (1993) Does Supplemental Instruction really work and what is it anyway? *Studies in Higher Education* 18(2), 165-176.
- Congos, D. H., Langsam, D. M., and Schoeps, N. (1997) Supplemental Instruction: A successful approach to learning how to learn College Introductory Biology. *The Journal of Teaching and Learning* 2(1), 2-17.
- Congos, D. H. and Schoeps, N. (1998) Inside Supplemental Instruction Sessions: One Model of What Happens that Improves Grades and Retention. *Research and Teaching in Developmental Education* 15(1).
- Entwistle, N. J. (1992) *The impact of teaching and learning outcomes in higher education: a literature review*. Sheffield: Universities Staff Development Unit.
- Entwistle, N. J. and Tait, H. (1995) *The Revised Approaches to Studying Inventory*. Centre for Research on Learning and Instruction. Edinburgh: University of Edinburgh.
- Etter, E. R., Burmeister, S. L., and Elder, R. J. (2000) Supplemental Instruction in Accounting Principles courses. *Accounting Education: Journal of Theory, Practice and Research*.
- Garland, M., and Gordy, K. (1987) Supplemental Instruction in the context of critical thinking. Unpublished manuscript, The University of Missouri-Kansas City. Available via www.umkc.edu/centers/cad/si/sidocs/mgctth89.htm.
- Gibbs, G. (1990) *Improving Student Learning Project – Briefing Paper*. CNA and Oxford Centre for Staff and Learning Development.
- Gordy, Z. K., and Garland, M. (1987) Improving college-level thinking through Supplemental Instruction. Unpublished manuscript, The University of Missouri-Kansas City. Available via www.umkc.edu/centers/cad/si/sidocs/mgthin89.htm.
- Kochenour, E. O., Jolley, D. S., Kaup, J. G., Patrick, D. L., Roach, K. D., and Wenzler, L. A. (1997) Supplemental Instruction: An effective component of student affairs programming. *Journal of College Student Development* 38(6), 577-586.
- Koehler, C. (1995) Supplemental Instruction and critical thinking. *Supplemental Instruction Update* 1(3).
- Light, R. J. (1990) *The Harvard assessment seminars: Explorations with students and faculty about teaching, learning, and student life*. Cambridge, MA: Harvard University.
- Martin, D. C. and Arendale, D. (1993) Review of research on Supplemental Instruction. In D. C. Martin, and D. Arendale (eds.) *Supplemental Instruction: Improving first-year student success in high-risk courses* (second edition). Columbia, SC: National Resource Center for The Freshman Year Experience and Students in Transition, 19-26. (ERIC Document Reproduction Service, No. ED 354 839).
- Pines, A. L. and West, L. H. (1986) Conceptual understanding and science learning: An interpretation of research within a sources-of-knowledge framework. *Science Education* 70, 583-604.
- Pintrich, P. R., Smith, D. A. F., Garcia, T. and McKeachie, W. J. (1991) *A manual for the use of the Motivated Strategies for Learning Questionnaire*. National Center for Research to Improve Postsecondary Teaching and Learning: University of Michigan.
- Wallace, J. (1997) Student as Mentor and Role Model to Support Effective Learning. In J. Stephenson (ed.) *Mentoring – the new panacea?* Norfolk: Peter Francis, 78-92.
- Wilcox, F. K. and Koehler, C. (1996) Supplemental Instruction: Critical thinking and academic assistance. *Metropolitan Universities: An International forum* 6(4), 87-99.